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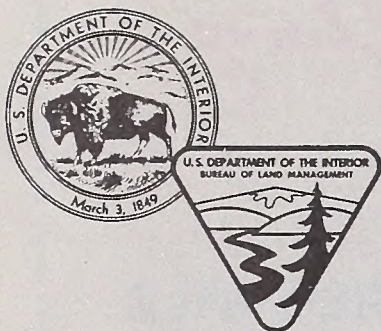
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OUR PUBLIC LANDS

ONE MEASURED MILE
TO PRESERVE HISTORY

Page 12





U.S. DEPARTMENT OF THE INTERIOR
Rogers C. B. Morton, Secretary

BUREAU OF LAND MANAGEMENT
Curt Berklund, Director

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

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Jim Robinson, Editor

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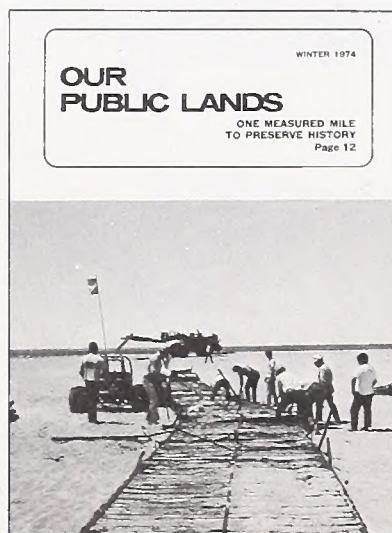
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OUR PUBLIC LANDS

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California 4-wheel drive groups, concerned lest history be lost, banded together to save ONE MEASURED MILE. See page 12.

HIGHLIGHTS

Government Accelerates Development of Energy Resources

Federal management of petroleum resources for development to meet the national energy shortage is being accelerated by the Bureau of Land Management in numerous ways in accord with President Richard Nixon's energy policies set forth to Congress in the spring and summer of 1973.

BLM's role in the leasing of submerged lands of the Outer Continental Shelf is under a 5-year leasing schedule established by Secretary of the Interior Rogers C. B. Morton.

Scheduled for lease sale in 1974 are two Gulf areas in deep water, some in depths exceeding 600 meters. The Department will issue final environmental impact statements before a decision is made to complete the lease sales to petroleum industry firms which have nominated the tracts. The Secretary will make the final decision whether to sell only after the public has had an opportunity to comment on the final impact statements, and after he has reviewed the statements and other energy alternatives.

In addition to the Gulf sales, BLM has established new OCS offices in Los Angeles, Anchorage, and New York. Until now, all OCS leasing has been handled through the New Orleans office. It is stressed that the New York office will be for environmental study purposes at this time and will not be an OCS leasing office.

These new offices will intensify the Bureau's efforts to gather and assess environmental information pertaining to possible oil and gas leasing on submerged

lands along the Pacific Coast and in the Atlantic coastal waters.

Each new office will be staffed with an Environmental Assessment Team, a multi-disciplinary effort which will include oceanographers, biologists, geologists, economists, and planners. Their task is to gather and analyze data for use in the subsequent preparation of environmental impact statements in accordance with the National Environmental Policy Act of 1969.

Geothermal Steam Resources

In another energy resource area, a final environmental impact statement describing potential development of geothermal steam resources has been submitted to the President's Council on Environmental Quality.

The 4-volume, 2,460 page statement evaluates possible impacts resulting from adoption of the Department's proposed geothermal regulations for the leasing of federally owned geothermal resources.

Preparation or review of the material developed for use in the statement involved the Department of the Interior's agencies, seven other Federal Departments and independent agencies, numerous State, local, and private organizations, representatives of private industry, and interested individuals.

Only a small portion of an estimated 550 million acres of federally owned land would be subject to geothermal leasing. Only 1 million acres now are classified as known geothermal resource areas (KRGAs), and 54 million acres are identified as potential geothermal resource areas (PGRAs). However, as a result of

further exploration, additional areas probably will be identified.

As in the case of off-shore oil and gas leases, no resource development will be scheduled until the public has an opportunity to review the impact statement.

Coal, Oil Shale Resources

In upland mineral leasing of coal resources, the policy concerning leasing applications is being considered on an individual application basis instead of the previous policy which required an en masse evaluation. It was expected that this modification of policy might open up development of more coal resources to alleviate the Nation's energy resource shortage.

In another area of upland mineral leasing, leases are being offered for development of oil shale lands in the Green River formation which lies athwart the borders of Colorado, Utah, and Wyoming beginning in early January.

Colorado's Powderhorn Is New BLM Primitive Area

Involvement and evolvement in the process of land use planning were the twin factors leading to the designation of 40,400-acres in southwestern Colorado as a



At Powderhorn dedication, from left: Assistant Secretary-Land and Water Resources Jack O. Horton, BLM Director Curt Berklund, Secretary of the Interior Rogers C. B. Morton

Primitive Area, thus preserving for future generations the unique values that the land has today.

The Powderhorn Primitive Area is, BLM Director Curt Berklund said in his dedication ceremony remarks, "a first hand example of the new Bureau of Land Management and its evolvement into a new philosophy of truly balanced land management."

Berklund's theme was also developed by Secretary of the Interior Rogers C. B. Morton, who said that the dedication places BLM in a face-to-face land use planning process with the citizens who use the land.

Secretary Morton defined land use planning as "the proposition of discontinuing the growth of America like Topsy . . . so that the quality of life is not invaded and deteriorated by our own efforts."

Former Senator John Birmingham, who is Special Assistant to Governor John Vanderhoof, noted that Federal and State levels of government have begun to work together in land use planning to permit development "in a more orderly fashion, on a more quality basis."

The Powderhorn Primitive Area is part of the 243,000 acre Cebolla-Powderhorn management unit of the Bureau's Montrose District. The new area is ecologically unique, containing high gentle slopes and meadows above 12,000 feet elevation which is a feature characterized as alpine tundra and not found south of the McKenzie River of Canada.

Nearly 300 people attended the dedication of the area last fall.

Primitive Area designation means that grazing will be permitted under BLM regulations, that hunting, fishing, and camping will still be allowed, but that no motorized or mechanical equipment will be permitted in the area.

California Desert Recreation Vehicle Use Program Is Established

An interim critical management program for the use of recreational vehicles on the California desert has been established, but there was speculation as 1973 drew to a close that the growing shortage of gasoline for all but essential travel may have an even greater short run effect in controlling off-road vehicle usage.

The interim management plan was established to protect human life and property, halt natural resource destruction, and eliminate conflicts among resources and users.

Recreation use of the 12-million acre BLM administered part of the desert has more than doubled—from

Continued on page 22

It took 12 men to make it up

DESERT WATERBED

By Steve Smith

Recreation Planner
BLM District Office
Grand Junction, Colorado

COLORADO'S NEWEST "waterbed" required the efforts of 12 men to make it ready for occupancy.

The installation is truly a waterbed, for it holds 200,000 gallons of water in an open butyl rubber tank laid into the desert floor north of Grand Junction in the western part of the State.

Livestock and wildlife will benefit year round from the water catchment, which was bulldozed out of the desert floor over an area 70x90 feet. Pipelines will connect drinking installations up to three miles away.

A storage apron above the water bed will collect rain and snow runoff and store it until automatic valves release it to enter the storage tank. Eventually this waterbed will be connected by a gravity flow pipeline to one nearby which was built earlier.

The new waterbed was built by two men who share a 27,249 acre grazing allotment on public land on which they run 520 head of cattle. The Bureau of Land Management provided technical assistance and materials for the project, while the grazers supplied manpower and earthmoving equipment. □



Dragon Tracks are Light Tracks



HOW'S THAT again? Dragons, by their very nature, didn't make light tracks. But this one does. Not only that, the dragons of legend started fires with their flaming breath, but this one—the Twister Dragon Wagon—helps put fires out.

The Twister Dragon Wagon is an 8-wheel drive, on-and-off road experimental vehicle that the Bureau of Land Management's Carson City District Office tested last summer for its adaptability in Federal fire suppression.

Holy smoke! It worked!

BLM agreed to evaluate the truck for a 90-day field test in what proved to be one of the worst fire seasons on record in this district.

Some conversion was necessary to make the truck a firefighting unit. Bob Ertel, the District's Fire Control Officer, directed installation of equipment that the manufacturer provided to convert the truck into a pumper.

Then Ertel borrowed other equipment from the Boise

Interagency Fire Center, other BLM Districts, private companies, and even from Storey County, Nev. The end result was a heavy pumper capable of carrying 1,000 gallons of water and 200 gallons of liquid concentrate fire retardant.

During the 90-day test, Ertel dispatched the unit to 25 fires in Nevada, California, and Oregon. The Dragon Wagon rolled up approximately 7,000 miles in this period.

One big advantage that the Dragon Wagon had over conventional fire suppression vehicles lay in its eight wheels, which moved on radial tires. These tires could be inflated to between 45 and 55 pounds per square inch for highway travel, and could attain a top speed of 55 miles per hour carrying this pressure.

However, when it took to the fragile off-road soils, the tires were deflated to between 12 and 18 pounds, and this caused very little disturbance of the surface.

Its first test was a big one that came right after the conversion operations had been completed. Ertel assigned the unit and its 6-man crew to the Jumbo Grade fire, one of the hottest of the year. The blaze was threatening to destroy historic Virginia City, home of the famed Comstock Lode, and one of the biggest silver and gold producing areas in the mining booms of the late 1800's.

Two Bureau firefighting employees, Fred Young and

By **NORM MURRAY**

Fallon Area Manager
BLM District Office
Carson City, Nevada



Bob Austin, were driving the Twister Dragon Wagon up the Jumbo Grade when the fire flashed across the road.

In a matter of seconds, the entire canyon was ablaze. The Dragon Wagon was engulfed in a thick curtain of smoke and flames. Visibility by this time was about 2 feet, and in the confines of the super-heated cab Young's hair was beginning to scorch.

Because of the intense heat and heavy smoke, the crew was forced to abandon the Dragon Wagon in the bed of Jumbo Creek. They were able to make their way out on foot following the creek bed.

"When we made it to safety," Young said, "we looked back. The Dragon Wagon was surrounded by flames, and for a moment I thought it was going to blow up."

But when the fire passed by, BLM crews found the damage was limited to blistered paint, cracked windows, and one burning tire. Despite news reports by the local media that the Dragon Wagon was destroyed, Bureau men drove it out of the fire the next day, gave it a few minor repairs, and it was back in action the following day.

The Federal fire suppression effort to combat wildfires on range lands and in forests is big business. It has to be because the natural resources of the National Resource Lands and other Federal lands hold untold riches badly needed by a growing Nation which is using more and more of those resources.



A yeoman effort in federal fire suppression

Evaluating the Twister Dragon Wagon was not an unusual opportunity for Federal firefighters, who are constantly on the alert for methods and tools to improve their effectiveness in protecting Federal lands from the ravages of wildfire.

Last summer's evaluation wasn't confined to BLM-administered public lands. The equipment put forth a yeoman effort on the Toiyabe National Forest fire in California.

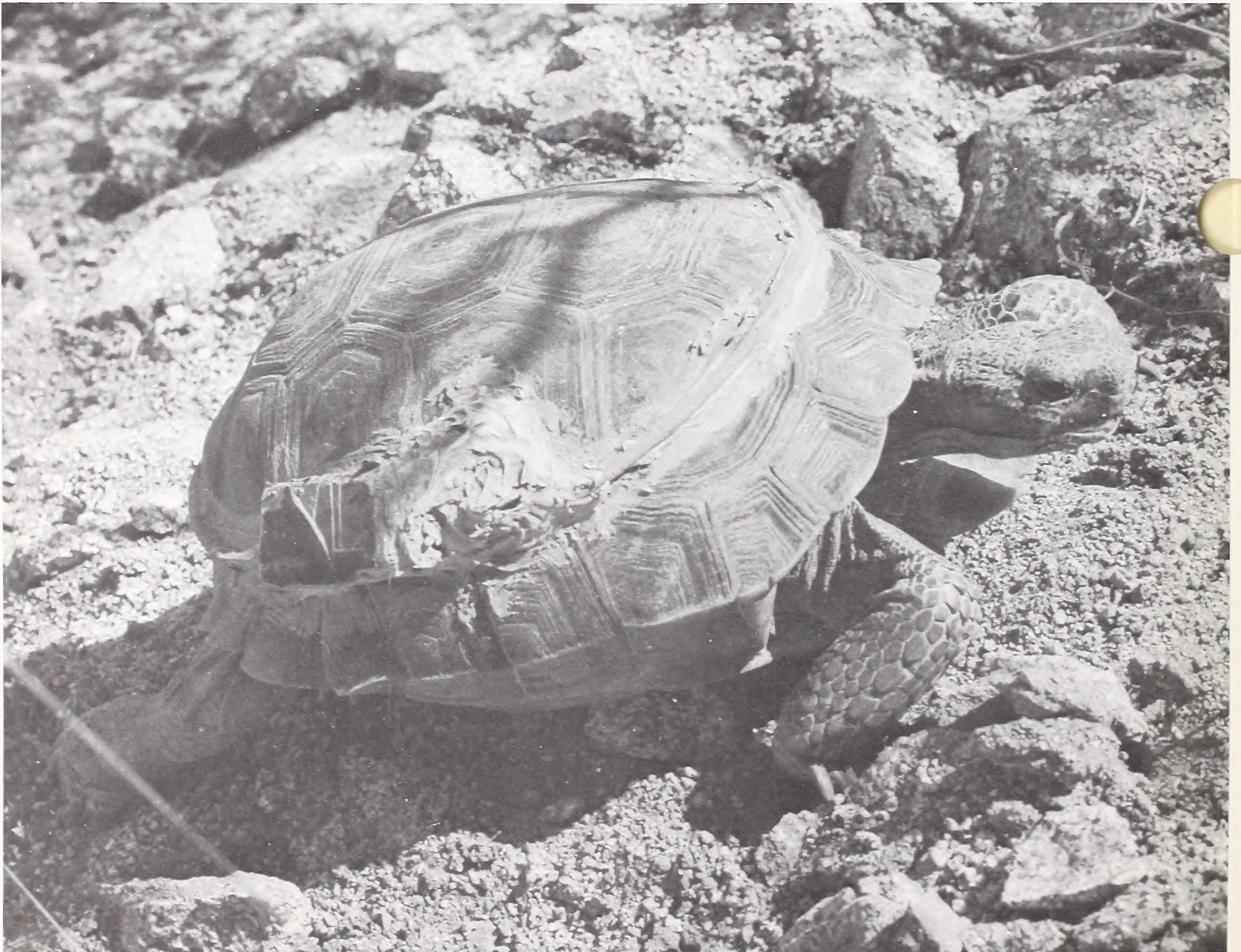
The Dragon Wagon's ability to negotiate rough terrain, to go places and do things that other equipment can't and also to be able to travel fast on the smooth highways so it can get to a fire quickly—well, all these factors could change a lot of things about fighting range and forest fires.

In the average off-road firefighting effort, bulldozers are used to dig fire breaks that keep the fire from progressing any farther along a fire line. As a result of last summer's experience, Ertel now feels that a combination of heavy but highly maneuverable pumpers along with aerial fire retardant planes dropping their quenching chemical could eliminate the need for bulldozers. Thus, in time, fragile soils may no longer be torn up by bulldozers.

But the crowning accolade came from Bob Carroll, the BLM firefighter in charge of evaluating the machine for the Carson City District.

"Dragon tracks are light tracks," he said. □

Tortoises Wired



DR. KRISTIN BERRY guided her compact auto deftly over a washboard road northeast of Mojave as she talked about the desert tortoise, California's State reptile. In the back seat, sharing limited space with lunch, water, and mini-radio equipment, was Lou Nicholson, a student at Cerro Coso College at Ridgecrest.

Miss Nicholson is considered a super spotter of tortoises in the desert. She lived up to her billing as the team rounded a loping curve.

"There's one up ahead on its back!," she warned.

The tortoise was a large male, lying between the ruts with his legs and head drawn into his shell. Around him

plants. These plants last longer in the centers of roadways, apparently because moisture is retained longer in adjacent ruts.

About 1 year in 5 is a good food year for the tortoise. Heavy winter rainfall, as the desert had last winter, is followed by a carpet of desert wildflowers. The hibernating tortoises emerge from their burrows in late February or early March to feast on the flowers and plants. They leave the perennials alone.

A plentiful food supply is conducive to courtship, and the females use their longer toenails to dig burrows for their eggs. When the food is exhausted, usually by mid-May, the tortoises begin spending more time in

for Sound

were many scrambled tracks, indicating a fight with another male. Although the tracks were fresh, the other male was nowhere in sight and there were no signs of injury.

Dr. Berry said that a tortoise usually can turn himself right side up if the terrain is rough. He extends his neck, and uses it and his head as a lever. As soon as he gets enough for a foot to reach ground, the rest is easy.

This tortoise, however, would not be able to right himself on a smooth surface such as a highway. And a half hour in that position in the hot desert sun usually is fatal.

But the belly of the tortoise was still cool, and so they reflippped the flipped tortoise so that he was right side up and nudged him into the shade of a creosote bush at the side of the road.

Dr. Berry said that roadways are one of the major hazards to the desert tortoise, because the reptile's slow gait and speeding vehicles are a deadly mis-match. Occasionally a crushed tortoise is seen even along rough dirt roads where speed is reduced.

The dirt roads have a special attraction for tortoises. They feed mostly on the leaves and flowers of annual

No. 213 and her gentleman friend

their burrows. By June most of them are estivating, that is, lying in their burrows in a state of slowed metabolism, conserving their fat in the long wait until another springtime.

The larger tortoises and the hatchlings come out in late August or September and browse on dry annuals. Mating occurs, but the females lay no eggs until the following spring. Hibernation begins in late September or October and continues throughout the winter.

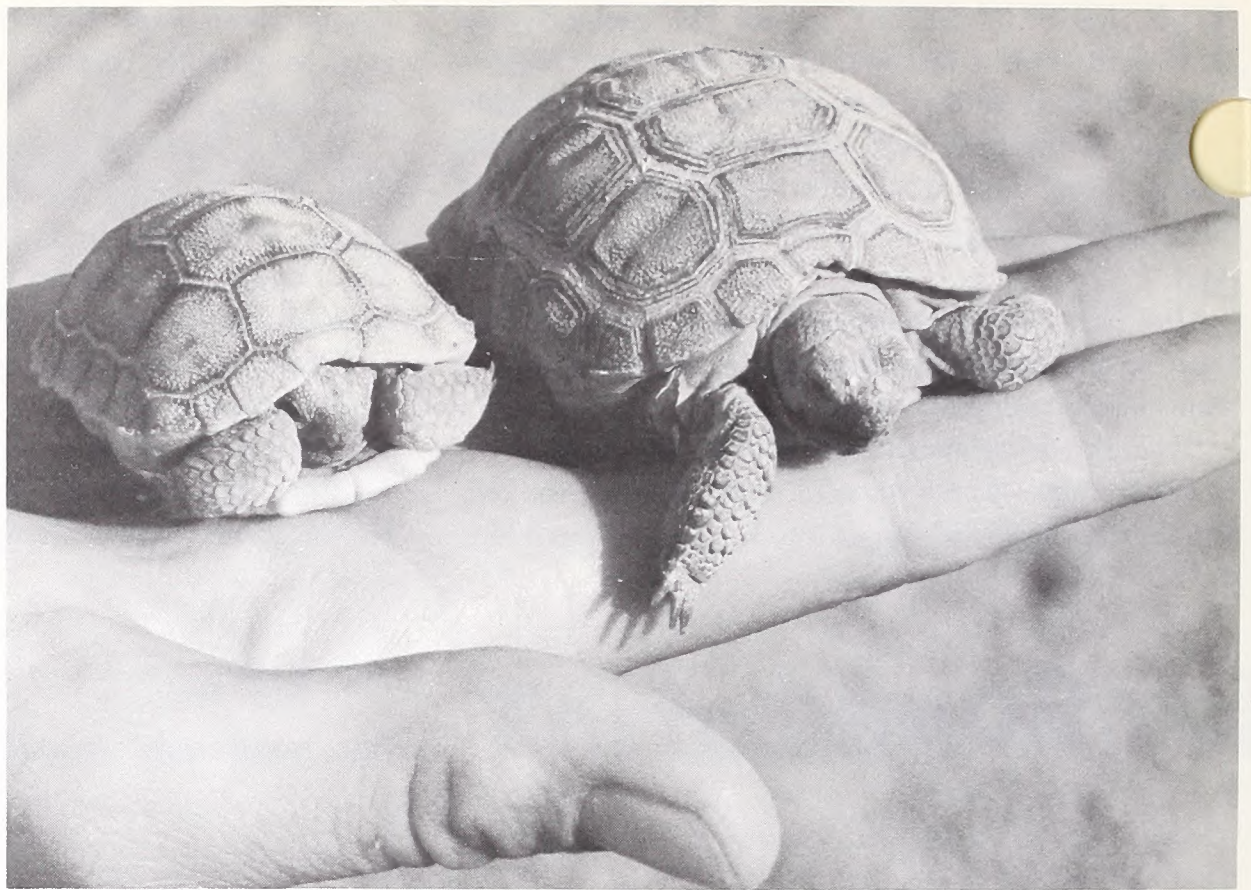
The baby tortoise is encased in a folded position in an egg that looks like a ping pong ball. After worrying a crack in the egg with his tiny egg tooth, the hatchling unfolds and crawls out into a hostile environment.

Chances are one in 10 that he is unhealthy or deformed. His shell is soft, and there is no parental care. He crawls out of his mother's burrow and is confronted by hungry road runners, burrowing owls, gophers, skunks, and the aggressive Mojave green rattlesnake. Other hazards to his survival are the hot sun and too little food. The small burrows he is able to make offer little protection from weather and his predatory enemies.

Note radio transmitter on shell above tortoise's right hind leg

By **TOM EVANS**

Public Information Specialist
BLM State Office
Sacramento, California



With all these dangers, the survival rate is low. In the wild, a large female may lay a clutch of 4 to 10 eggs in a good-food year. All of the hatchlings may die. It is estimated that not more than 5 of each 100 young reach maturity.

A comparatively new threat to survival is the off-road vehicle. This intruder destroys soil cover, disturbs and breaks up nests, caves in winter and summer dens, and tears out plants that are used for forage and shelter from the sun.

The shell of the tortoise remains soft until he is 5 to 10 years old. He can be squeezed to death in the hand without much pressure at this immature age. He is easily crushed by a vehicle.

U.S. Highway 395 and State Routes 58 and 14 go through prime tortoise habitat. Motorists take thousands of these reptiles for pets despite a law that provides a \$500 fine for doing so.

Cattle, sheep, and burros compete directly with the tortoise for food. Rapid human population growth in the desert is a constant and widening encroachment.

If a substantial number of breeding tortoises are removed from an area, or die, several decades may pass before the population recovers.

The tortoise has many things going against him, but one thing in his favor is his life span. Dr. Berry thinks that he may live up to 100 years.

Another thing going for the tortoise is Dr. Berry.

She started working for survival of the reptile in 1971 in a State Division of Highways project. An extension of Highway 53 from Mojave to Boron was to pass through prime tortoise habitat, and the State decided to relocate the tortoises.

Dr. Berry took 70 of them out of the highway right-of-way. As part of her research to learn how adaptable they are to new habitat, she equipped 11 of the reptiles with small transmitters so that their movements could be tracked.

One of the first things she learned was that the tortoises want to go home. Their brains contain a fairly good homing device, keeping them within 16° compass heading as they plod toward familiar habitat.

Removal of the tortoises from the highway right-of-way has been stopped, Dr. Berry said, because the release area is too heavily used for motorcycle races. She said five races have been held in the area this year, three of them in trespass without the permits required by BLM regulations. Legal action as a result of this was in process.

Since beginning her work with the State Division of Highways, Dr. Berry has been employed to conduct flora and fauna inventories of several areas of the California Desert for the Bureau of Land Management's Desert Plan Staff. As part of this work she has identified an area of usually good habitat and heavy tortoise population in the Rand District.



Dr. Berry originally proposed that a 10 square mile area be set aside by BLM as a Nature Preserve to protect the tortoise from further human disturbance. There are an estimated 6,000 to 10,000 tortoises in the proposed preserve.

The Bureau has now recommended an expanded area, about 9 miles north of California City, be set aside as a Nature Preserve. BLM already has closed much of the area to off-road vehicle use in its California Desert ORV Recreation Management Program. About half of the proposed 34.5 square mile area is BLM National Resource Lands. The remainder is owned by many persons. Preliminary contacts have been made with these owners to learn if they would be agreeable to land exchanges. Dr. Berry said most of the owners replied, and the response was favorable.

Dr. Berry brought her car to a halt at the foot of a 45° slope. She connected a wire from a hand-held receiver to the car door, and used the car as an antenna. The directional loop antenna on the receiver picked up a constant blip, coming from the top of the hill.

About 1/4 mile up the steep slope the signal became strong. With a little search, Tortoise No. 213, a female, was spotted in the entrance of a burrow under a creosote bush. She has been found several times recently and apparently has stopped her attempt to go home.

One day not long ago, Dr. Berry found No. 213 with a tortoise gentleman friend.

No. 213 comes from a long line. It is believed the desert tortoise has existed for more than 120 million years—before the dinosaur—and formerly was as large as the Galapagos tortoise, which measures up to four feet in shell length. The largest desert tortoise now reaches about 14 inches in shell length and weighs about 15 pounds.

Dr. Berry said there are many desert tortoises in captivity in spite of a State law which prohibits taking, harassing, or killing the reptile. She urged that people who have tortoises not release them in the wild.

“It is unwise to release captives in the wild,” she said, “because the release may introduce diseases to the wild population; there might be a mixup of the gene pool and it could upset the food balance. In addition, most of the captive tortoises released don’t survive.”

The desert tortoises are among the many unusual—even rare—animals and plants which make this 12 million acres of National Resource Lands an unusual treasure. As the California Desert Recreation Management Program begins to have its effect in protecting this Federal real estate, the lot of the tortoise may be eased and his kind protected and preserved for future generations to see and enjoy. □

ONE MEASURED MILE

ACROSS THE whispering, shifting sands of the Imperial Sand Hills in southeastern California runs the trace of a roadway which was new when this century was young.

This roadway conquered what was regarded as the last obstacle in linking the commerce of the Southwest. (See OUR PUBLIC LANDS, "The Last Barrier," Winter 1972.)

How long was this colorful remnant of the past? There are conflicting reports about the original length of the famous old plank road running from Holtville, California, to Yuma, Arizona, across the Algodones Dunes, located in Imperial County, California. The general consensus is that the road was about 6½ miles long.

The first efforts to get cars across the dunes area consisted of laying a brush mat to keep the wheels from sinking into the sand, but the brush soon wore out or was covered by blowing sand and was generally unsatisfactory. About the time of World War I when the Model-T Ford was becoming a familiar sight on the American scene, a more stable type of track was built, and was known as the only wooden automobile railroad existing in the United States.

The original road consisted of two parallel tracks of 2- by 8-inch planks, spiked to 2- by 6-inch ties 8 feet long. This made a 2-foot track on each side, with a turnout every mile or so for vehicles to pass. When the original board tracks wore out by 1916, they were replaced by a solid-plank road nailed to heavy cross ties and bound with strips of iron. The surface was coated with an asphalt and sand mixture to make a corduroy road. The planks were in 20- to 30-foot sections and could be moved at will with a team of mules as the sand shifted and covered them. These plank sections were replaced by an oil surfaced highway in 1924, which has subsequently become Interstate Highway 80 to Yuma.

For many years after the plank road was abandoned, visitors to "America's Sahara" could still see the

twisted and broken sections of the famous old landmark winding its way across the dunes. Whole sections began to disappear, piece by piece, as the recreation popularity of the area increased.

In March 1971, the Historical Society of Imperial County became concerned that soon there would be none of the famous old road left for later generations of people to see. So the members applied to the Bureau of Land Management for a Special Land Use Permit which would allow them to install a cable fence around a portion of the area, and to relocate a 1,600-foot strip within this fence to preserve it as a historical landmark. This project was completed in 1971.

In 1972, Don and Barbara Strong, who were representatives-at-large for CORVA (California Off-Road Vehicle Association), became interested in the history of the old plank road. They decided that steps should be taken to further preserve as much as possible of the remnants. "One measured mile" of the "automobile railroad" which used to run for over 6 miles became their goal, so they called upon members of the Association to help.

And help they did! In February 1973, 50 members met at the site with their dune buggies in tow and began the monumental task of moving the largest, best preserved sections of this road to a selected spot (which will eventually tie into the 1,600 foot section restored by Imperial County) and prepared the sand bed for the

By MICKI SMITH
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Off-road vehicle users wanted to help preserve history

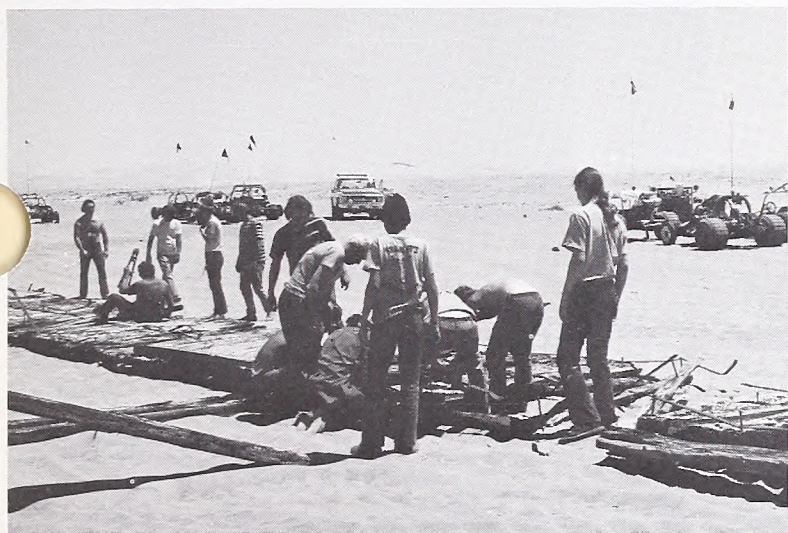
sections to lie upon. The project continued in March and again in April 1973.

To date, the CORVA volunteers have salvaged and re-laid approximately 400 feet of the planked sections. Since most of the participants live in the Metropolitan Los Angeles area, their efforts took a lot of their time. The project involved travelling some 200 miles one-way, towing their dune buggies along to be used in traversing the sand as well as hauling or towing the heavy sections of plank into place. They also had to be prepared to camp out for at least one night.

The U.S. Air Force detachment at nearby El Centro Naval Air Base contributed largely to the overall success of this project by furnishing a rough terrain forklift and

a large flatbed truck with sand tires. Airmen volunteered their free weekend time to drive the equipment, and this was a tremendous help to the CORVA group since they had been using only muscle and sweat to gather the pieces, load them on the dune buggies, and transport them to the site.

At least five individual CORVA clubs helped to get the job done: the Los Alamitos Dune Runners, Cranley's Desert Cats, Los Adventureros, California Dune Buggy Club, and the Desert Devils of San Diego. Through the endeavors of all these interested groups and people, a unique segment of history on the public land is preserved and protected for the enjoyment of all. □



Nattily attired in plus fours, stranded motorist abandons "tin lizzie" in historic photo

Note detour sign





From Buffalo to Bean Threshers



Pioneers made tall tales work for them

HALF TRUTHS and even downright untruths can be perpetuated for many years because no one takes the trouble to correct the errors and state the exact truth. In the West, tall tales were told about the richness of soil and the abundance of water—tall tales that contained some truth but were too often embellishments of the facts to suit the ambitions of land promoters or get-rich-quick schemers.

As this Nation pushed its frontiers Westward in a search for agricultural land, such tall tales were told and perpetuated until our borders stretched from sea to sea.

By **CHARLES R. FINCH**

Realty Specialist
BLM District Office
Montrose, Colorado

And in at least one case, homesteaders made the actual truth work for them.

In 1877 a surveyor in Colorado wrote this in his notebook: "The land surface here is prairie, usually slightly rolling, but level in many places. There is an abundance of good, tall grass. While there is no running water in this vicinity, water can be found by digging shallow wells, and there are frequent water holes along the draws. The soil is sandy and of very good quality. Thousands of buffalo can be seen every day feeding on the plains."

The statement about grass was true, as ranchers found to their joy and resulting prosperity. But the declaration about water was relative to the amount of potable water necessary for domestic livestock grazing, not agricultural irrigation. And of course the buffalo were gone in just a few years.

Nonetheless, 38 years later the surveyor's notes were

quoted in a book entitled "Free Homestead Lands of Colorado Described—A Handbook for Settlers." The very title was misleading, of course, for public land for homesteading was never free, only a bargain legislated by the Congress to help settle the Western lands.

The author described the amenities which public land in the State of Colorado offered to the family looking for Government land on which to settle. He listed the United States Government Land Office located in the small southwestern Colorado town of Durango. The area in the jurisdiction of the Durango Land Office area included 4,400,000 acres, of which 700,000 acres were available for homesteading. Most of that public land lay west of the community of Cortez and south of the Dolores River in the extreme southwestern part of Colorado, the plateau country.

Because of the information in this book and others like it, homesteaders moved into southwestern Colorado spurred on in later years by the dust bowl in the Great Plains. What they found was not grass-covered plains and abundant water, but rolling sagebrush hills, cut by red sandstone canyons, and very little water. The soil was indeed fertile: red and sandy.

There was precious little irrigation water, but there were enough winter snows and summer rains to grow some crops as the Indians had discovered centuries earlier. Dove Creek, a small town located 35 miles northwest of Cortez, became the pinto bean capital of the Nation, capitalizing on a crop grown there before the time of Christ. Pinto beans are a kind of mottled kidney bean, long a staple food of agriculturally inclined Indians which has won acceptance among other Americans.

Dryland farming was the common lot of the homesteaders in the West for many years (irrigation came later). When the beans were harvested, large steam-driven tractors with harvesters in tow would come and set up in central locations.

These harvesters, or threshers, were powered by long

leather and rubber belts driven by the tractors. The beans, vines and all, were thrown in one end of the thresher with pitchforks. The threshed, clean beans poured into sacks at the outlet, and the finished product was hauled to storage bins by horse and wagon.

A thresher required a crew of 10 to 12 men to haul vines, thresh, and haul the beans. The machines could process 100-pound sacks, as many as 150 to 200 per day. Wages for hand labor averaged \$1.00 per day and a crew bonus of 20 cents per 100-pound sack.

The coming of the old thresher was a real social event of the season. People came from the neighboring homesteads to socialize, work in the bean harvest, and join in the cooking chores to feed the hungry threshing crews. Early in 1972 one of these old bean threshers was found, long after its time, on a tract of National Resource Land in the Dove Creek area. The thresher has iron wheels and iron parts, but most of the machine is made of hardwood.

Like so much of the history of the Old West, the people of the times were too busy to write down the answers to questions that came to mind about the discovery: Who used it last? Why was it left here?—the minutiae of vignettted history.

It is probable that the thresher was manufactured in the 1920's, and was moved from homestead to homestead with a giant steam tractor.

The Bureau of Land Management's Area office in Durango and its Montrose District Office are working with the State Historical Society in the southwestern part of Colorado to place this old thresher in a museum or park.

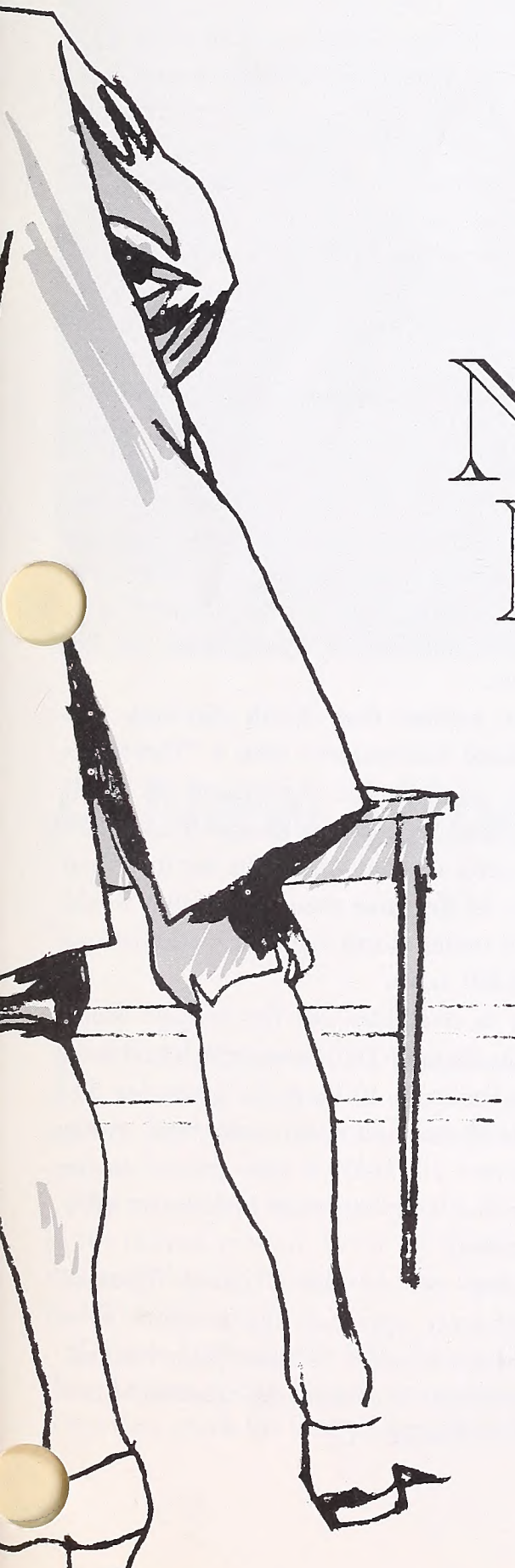
If the effort is successful, a new insight will be gained into the life of the early-day homesteader in southwestern Colorado.

More than that, future generations will learn how our pioneer forebears took the true parts of a tall tale and used it to wrest a living from the soil of the original public domain land. □





*Kentucky and Tennessee owe their
existence to this fidelity*



Virginia and North Carolina Honored Their Vows

THE WHIMISICAL generosity of English monarchs in giving away land with almost limitless boundaries for a century and a half created a delay in welding a nation from the American colonies which won their Revolutionary War.

By **PAUL C. HERNDON**

Writer-Editor
BLM, Washington, D.C.

By the close of the Colonial Period, 9 of the 13 original Colonies claimed western land as a part of their rightful area of sovereignty. These claims were based on colonial charters, often overlapping and conflicting, granted by the various English kings to individuals or groups of individuals who sponsored settlement in the New World.

The charter for Virginia, for example, originally called for sovereignty over all land between certain latitudes from the Atlantic to the Pacific Ocean. However, by the time of the American Revolution, the claims of foreign powers had forced a general recognition that the Mississippi River formed the extreme western boundary for all colonial claims.

After the Revolution, the States formed from the Original Colonies continued to press their western claims. But it was soon evident that these claims constituted a bar to the formation of a Federal Union.

Maryland and the other States which had no claim to western land pressed for the landed States to turn their western lands over to the Federal Government. This was accomplished by 1802 when Georgia became the last State to relinquish its claim to western land. (See "Birth of the Public Domain," OUR PUBLIC LANDS—Summer 1969.)

Once this was done, all lands beyond the crest of the Allegheny Mountains should, in theory, have become a part of the Nation's public domain. In reality this did not happen. Two States, Kentucky and Tennessee, have never been public land States, thus vacant and unowned land within their boundaries was not a part of the public domain. The reason lay in the stipulations imposed by North Carolina and the reservations made by Virginia in making their cession of their western land.

Virginia had pledged land bounties to those among her citizens who served in the Continental Army in 1775. As early as 1781, Virginia ceded her claims to those western lands which were north and west of the Ohio River. However, she retained that part of her western claim lying within the boundaries of the present State of Kentucky as a reserve from which she could honor commitments made to her war veterans.

In 1776 the Continental Congress made a similar commitment to all its soldiers. However, Virginia felt that the commitment of the Continental Congress did not, in any way, negate her own commitment to her own citizens, since her promise had been made independently of the Federal Government. In some cases the State's commitment amounted to 10 times the amount of land promised by the Federal Government.

It was for this reason that Virginia was determined to reserve a part of her western holdings and refused to cede the Kentucky lands. In addition to this, the State also made a stipulation in her Ohio cession to have certain lands in that area set aside for her veterans, in case the Kentucky land was insufficient to meet the demand.

Although Virginia had refused to cede its Kentucky land to the Federal Government as a public domain, she did consent to the creation of a separate and independent State from the area. Kentucky was then admitted into the Union in 1792.

North Carolina ceded her western land in 1790. This land now makes up the present State of Tennessee. Like Virginia, North Carolina had certain commitments, both to her war veterans and to certain individuals. In order for North Carolina to honor these commitments, she made certain stipulations:

1. Her Revolutionary War veterans would be allowed to lay off their legal compliments of land wherever they chose without any reference to any public standard of survey.
2. The Federal Government would honor all of the grants that the State had made to other citizens where those claims were located, on the ground or not.
3. Entries under the law of 1783 in the office of one John Armstrong (Armstrong seems to have been an entry taker, but has not been further identified) conflicting with prior claims were to be honored with unappropriated land within the lands ceded to the Federal Government.

It soon became evident that North Carolina had presented the Federal Government with a "Pandora's Box" of woes. In a report of November 10, 1791, Secretary of State Thomas Jefferson showed that Indian title to 7,500,000 acres of land within the territory had been extinguished. At the same time, claims that would have to be allowed under North Carolina's stipulations amounted to 8,118,601 acres.

Rather than try to straighten out this tangled skein, Congress named the State of Tennessee, which had been admitted into the Union in 1796, as its agent for disposing of all the land that had been vacant land within the State on February 18, 1841. It also granted to the State of Tennessee any land that might be left over after all grants were satisfied.

Thus it was that two of the Original Thirteen Colonies, by stubbornly opposing the pressure of a new national affiliation in order to honor prior commitments, were instrumental in causing the creation of two new States in the new Union. □



A New Kind of Conservation

Horse enduro emphasizes sparing rider and mount

ENDURO COMPETITIONS where the endurance of rider and machine to complete a race are pitted against time are common enough throughout the country.

The present has its counterpart in the past as far back as the chariot races in Rome's Coliseum, as recently as the Pony Express Riders who rode their mounts to death to deliver the mail.

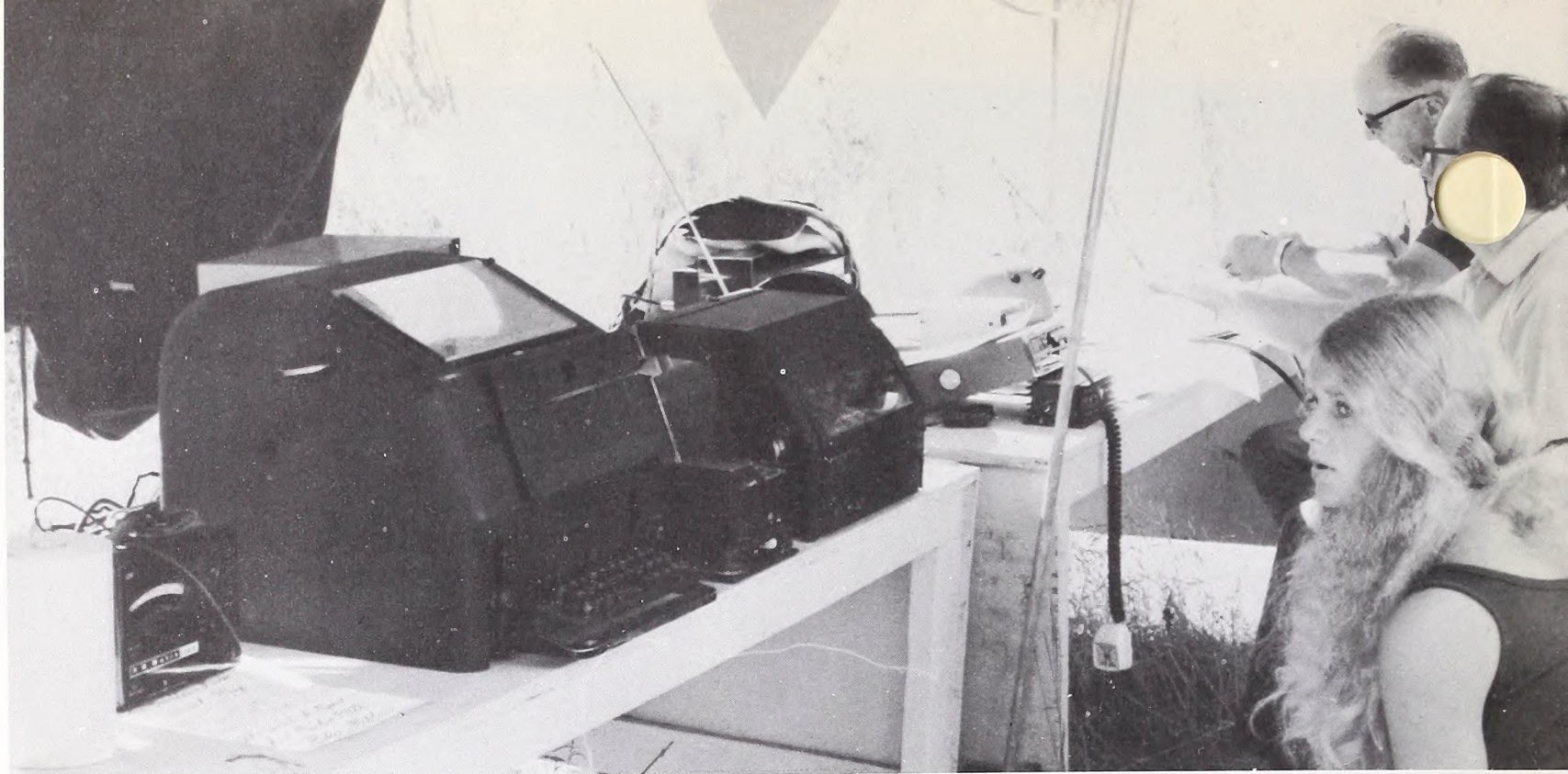
Today's Indianapolis 500 Memorial Day race, and the countless stock car races where motor cars flame out when they reach the limit of mechanical endurance, are

only extensions of Man's age-old consuming passion to pit himself and his machines against the odds, and gamble to win.

But a new kind of endurance race, one involving horses where a rider's skill to spare his mount is a criterion, is developing. And the public lands of the

By DICK HARLOW

Information and Education Officer
BLM District Office
Folsom, California



Teletype and radio equipment

West are making a contribution to this new kind of humane enduro.

Last Father's Day, 96 horses lined up at the starting line in Calaveras County, California. They were the mounts in a 10½-hour race over a 50-mile race track which was staffed with veterinarians at four check points.

The vets were there to check the physical condition of the mounts at each stop, and remove from the competition any mount whose physical examination revealed he was not in good enough condition to complete the enduro.

Although the race began at a private campground on private property, at least 10 percent of the enduro traversed National Resource Lands, mainly on established roads and trails.

The winner is determined by the fastest rider—plus the condition of his horse.

The day before the race each entry horse was checked for pulse, respiration, lameness, and general health. The morning of the race, at the start, finish, and each of three check points in between, each entry had other vet checks.

Here the vets checked for shock, dehydration, mouth mucus, and yellow eyes, in addition to the items checked the day before. Each stop, except lunch, required a 15-minute rest with "vet" checks at the beginning and end. The lunch stop was an hour.

One of the most critical factors in the vet check was the pulse rate. For a normal healthy horse, the pulse

rate should average between 36–45. After the rest period if the pulse rate was over 60, the horse was probably removed from the race, especially if other conditions indicating exhaustion or poor condition were noted.

The race began at 6 a.m. Riders had to be into the first first check point by 9, the second by noon, the third by 3, and at the finish by 4:30 p.m. If riders did not make the check points by this time, they were permitted to complete the enduro.

Had there been an accident of some type or the necessity for removing a horse or rider from the enduro, provisions were made to handle such an event. The hospital in San Andreas had emergency facilities ready for any treatment that might be needed. There were also two horse trailers placed in strategic locations to pick up any injured horses.

Weight and breed of horse are very important considerations in endurance riding. Often younger riders will finish in the top 10 mainly because of weight and stamina. The Arabian breed of horse is well known to endurance riders. Last year all of the top 10 were Arabian. The prime age of the horse for endurance racing tends to be in the 7- to 9-year age bracket.

At the Calaveras County Enduro, Donna Fitzgerald of Reno took first place when she finished in 6 hours and 10 minutes, riding an Arabian named Witezarif. Two feet behind her was her 10-year-old son, Mike, also riding an Arabian.

Points gathered in this race were tallied and counted towards a yearly total. Several clubs and breeds offer



Even the blacksmith was here

prizes for the most points gathered during the year. Three of the major clubs are the American Endurance Ride Conference, the Cal-Western Appaloosa, and the California State Horseman's Association. Endurance racing such as this has been occurring widely for the last 10 years.

Awards for this race were a trophy and monogrammed blanket for the first place horse and rider, and for the best conditioned horse and rider. The best conditioned horse award was presented to the best conditioned horse among the first 10, judged so by the veterinarians.

Special medallions were awarded to the first in purebred Arabian, registered quarter horse, registered Appaloosa horse, registered thoroughbred horse, resident of Calaveras County, and Junior Rider (under 16 years old, accompanied by an adult). Each successful rider was also awarded the Bronze Blue Mountain Buckle.

The Delta Amateur Radio Club manned all check points with radios and teletype equipment. This gave additional safety precautions, and also direct printouts from each check point to the start-finish point.

Specific rules were established for the endurance ride:

- No smoking permitted on the trail.
- All horses had to be at least 5 years of age.
- Horses had to stand all vet inspections that were required.

- No mare carrying a foal was permitted to compete.
- The opinion of the vet was final on all matters concerning the condition of the horse.
- Use of stimulants was prohibited, and all horses were subject to saliva and urine tests.
- Failure to be ready to start at the time designated would disqualify the horse and rider.
- Every horse had to stay on the trail, and be checked through each control point.
- Abuse of horses, or lack of condition or lameness at any time throughout the ride, disqualified competitions.
- To be eligible for the Junior Trophy, riders had to be less than 16 years of age.
- Persons under 16 years of age had to be accompanied by an adult (21) sponsor who was entered in the ride, and agreed to remain with the minor throughout the entire ride. Minors were disqualified if seen at any point on the trail without their sponsor.
- To be awarded a medallion, a horse with the same continuous rider had to cross the finish line within 10½ hours of starting time.

A mixed pattern of Federal, State, and private land ownership over that terrain picked for the Enduro made the use of portions of the National Resource Lands essential to successfully carrying out the race. The wide open spaces typified by the Western public lands have long provided room to race for the competitive minded, but the horse enduro which emphasizes sparing the mount and rider is a new kind of conservation. □

Continued from page 4

5 million visitor use days to 11 million—since the Bureau of Land Management made its initial California Desert Study in 1968.

More than 70 percent of this visitor use involves recreational vehicles. Thus the interim plan was aimed at providing areas where recreation vehicles including ORVs could continue to be used in speed and endurance competitions, and in unrestricted use by unorganized recreational vehicles. The interim plan, however, also closes other areas to protect the natural resources which would be endangered by the presence of off-road vehicles.

The Bureau regards the interim program as a first generation planning and management effort that must remain flexible and dynamic. Although there has been widespread public participation in the development of the critical management program, BLM plans to continue to work with desert user groups, conservation organizations, and other interested people.

Whatever the short term effect of the gasoline shortage may turn out to be, the interim management program is being regarded as a necessary first step in providing for the safety and rights of user groups, as well as preserving and protecting the vast and unique natural resource values of the desert lands.

OUR PUBLIC LANDS Magazine Will Cost \$2.70 Per Year

Another increase in the subscription and single issue cost of OUR PUBLIC LANDS has been ordered by the U.S. Government Printing Office.

The new price is \$2.70 per year effective January 1, 1974. In addition to the subscription increase of \$.70 per year, the cost of single copies was increased from \$.55 to \$.70, and the cost of foreign mailing was increased from \$.50 to \$.70.

In a letter to all Printing and Publishing Officials of the Federal Government, Public Printer T. F. McCormick said:

“Historically, the intent of Congress has been that the entire cost of the publications sales program of the Government Printing Office including labor, material, and overhead incurred in printing, warehousing, and distribution be self-sustaining.”

The prices for subscriptions, single copies, and foreign mailing were raised in the summer of 1973 to \$2.00 per year for subscriptions, \$.55 for single copies, and \$.50 for foreign mailing.

At that time, the Government Printing Office pointed out that increased postage costs required by the U.S. Postal Service had made the magazine's increased prices necessary.

The increase in 1972 was the first for OUR PUBLIC LANDS in more than 5 years. The magazine's new price increase was about the same proportionately as other dated periodicals issued by Federal agencies.

In explaining the increase, Mr. McCormick noted that “with few exceptions, prices computed by the new scale are only slightly more than the interim prices announced last year.”

OUR PUBLIC LANDS is delivered four times a year to just over 51,000 subscribers. These readers are conservationists and others interested in the environmental aspects of natural resources under Federal land management. OUR PUBLIC LANDS is also the only official source of listings for the sale of BLM-administered lands.

Subscription moneys for the magazine are paid to the Superintendent of Documents, U.S. Government Printing Office for the cost of publishing and mailing to subscribers.

In addition, the Bureau of Land Management purchases a modest number for distribution to Federal depository libraries, to land managing agencies of the Federal and State governments, and to BLM executives. The magazine, now in its 24th year, is published to explain the Bureau's management of these National Resource Lands.

BLM Announces 1972 Edition of Public Land Statistics

“Public Land Statistics,” the Bureau of Land Management's popular annual compilation of data, is now available in its 1972 edition. The publication contains information about all of the nation's public lands, but special emphasis is given to the 450 million acres of National Resource Lands administered by the Bureau.

The book provides information about Federal income from the sale of public land, from the sale of public land timber, mineral leasing, and livestock grazing. Its tables also reflect the growing recreational use of public lands located primarily in 10 Western States and Alaska.

In 1972 revenue collected from all sources amounted to \$525,093,572. Oil and gas leases on the Outer Continental Shelf produced \$279,352,756 of this revenue.

“Public Land Statistics” may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The cost is \$1.85.



This is a compilation of the most up-to-date information possible on up-coming sales of public lands by State Offices of the Bureau of Land Management. For details of land descriptions, prices, and other information pertinent to sales, you must write the individual State Office concerned. In most cases, there are adjoining land-owners who have statutory preference rights and may wish to exercise them to buy the land. Sales notices will point out, insofar as possible, problems relating to (1) access, (2) adjoining owner preference rights, (3) small-tract sales limitation of one per customer, and other pertinent information. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Sales listed can be canceled on short notice for administrative and technical reasons. A listing of BLM State Offices with addresses is found on the opposite page.

Adjoining landowners have first rights in purchasing public land advertised for sale, and in many cases will prefer to exercise this right.

OREGON

80 A, identified as OR 8343, appraised at \$2,025. Tract is surrounded by private land, is located 12 miles northeast of Hermiston in Umatilla County. U.S. Highway 395 crosses the tract and provides legal access. Most of the acreage slopes into Cold Springs Canyon which traverses the tract from east to west, and some flat land is found in the southeast corner. Soils are sandy and portions are subject to wind erosion. Vegetation is scant in most areas except for sagebrush. There is no water except for an intermittent stream in Cold Springs Canyon. Precipitation average 10 inches per year, and the normal annual temperature range is 0° to 100°. Elevation ranges from 710 to 850 feet above mean sea level. Sale after March 1, 1974.

UTAH

U-0148837: An isolated tract, 9.25 acres, appraised at \$4,400, located in north central Washington County,

approximately 18 miles northeast of St. George, Utah. The site is isolated with no legal access. Level to rolling, however, crossed by a deep wash. Deep clay loam soil suited for cultivation. No known source of water for irrigation. Suitable for residential development. The land ownership map indicates there are three contiguous land owners who can exercise the preference right provisions of R.S. 2455. No improvements on the land. Not needed for any public management program. Description T. 41 S., R. 13 W., SLM Sec. 6, lots 12 and 14. Sale after March 1, 1974.

WYOMING

257 A., 3 parcels located some 8 miles east of Hyattville in Big Horn County. Two of the parcels are surrounded by privately owned and State-owned lands. The remaining parcel is surrounded by privately owned lands. Topography varies from quite level to extremely rugged. No legal access. Two of the parcels contain perennial streams. Appraised values range from \$1,700 to \$13,000. For further details, contact the Wyoming State Office. Sale after April 25, 1974.

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555 Cordova St.
Anchorage, Alaska
99501
District Manager
P.O. Box 1150
Fairbanks, Alaska
99701

ARIZONA:
Federal Bldg.,
Room 3022
Phoenix, Ariz. 85025

CALIFORNIA:
2800 Cottage Way,
Room E-2841
Sacramento, Calif.
95825

COLORADO:
1600 Broadway
Room 700
Denver, Colo. 80202

IDAHO:
Federal Bldg.,
Room 334
550 W. Fort St.
Boise, Idaho 83702

**MONTANA (N. Dak.,
S. Dak.):**
Federal Bldg.
316 North 26th St.
Billings, Mont. 59101

NEVADA:
Federal Bldg.,
300 Booth St.
Reno, Nev. 89502

NEW MEXICO (Okla.):
Federal Bldg.
P.O. Box 1449
Sante Fe, N. Mex.
87501

OREGON (Washington):
729 Northeast
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Portland, Oreg. 97208

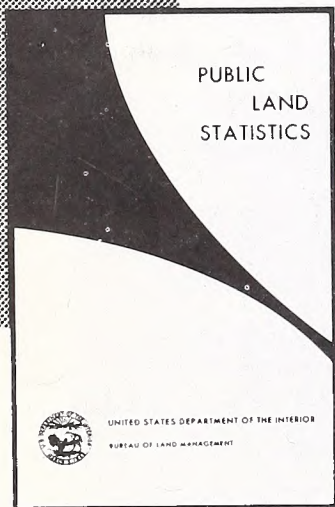
UTAH:
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125 South State St.
P.O. Box 11505
Salt Lake City, Utah
84111

**WYOMING (Nebr.,
Kans.):**
2120 Capitol Ave.
P.O. Box 1828
Cheyenne, Wyo.
82001

ALL OTHER STATES:
Robin Bldg.
7981 Eastern Ave.
Silver Spring, Md.
20910



For writers, editors, researchers, scholars . . .



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Public Land Statistics

contains information about all of the Nation's public lands, with special emphasis given to the National Resource Lands administered by the Bureau of Land Management.

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